different in composition, may underlie each map unit or may occur as minor lenses within each map unit.

contains minor amounts of fine particles

The units on this map indicate the first material of substantial thickness (generally greater than 3 feet) encountered beneath the soil layer. The soil layer (commonly a foot or two thick) is not mapped. Other materials,

Bedrock outcrops (ledge exposed at the ground surface) and areas where ledge is encountered directly beneath the soil layer are not shown on this map.

The map is intended to serve as an aid in reconnaissance evaluation of unconsolidated materials and can be used to identify areas of potential interest.

The major with the send as a substitute for onsite investigations.

U.S. Garlogical Survey OPEN FILE MAP This map is preliminary and has not been edited or reviewed for

POD MORE TO THE PLACE OF

UNCONSOLIDATED MATERIALS standards or nomenclature. massachusetts (Springfield South quad.). Surficial. 1:24,000. 1972. SPRINGFIELD SOUTH QUADRANGLE MASSACHUSETTS, CONNECTICUT

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conformity with Geological Survey

Particle sizes range from 100 percent coarse to 50 percent coarse and 50 percent sand-sized. Locally

SAND AND GRAVEL Particle sizes range from 50 percent coarse and 50 percent sand-sized to 25 percent coarse and 75 percent sand-sized. Includes deposits in which layers of well-sorted sand a few inches thick are interbedded with thin layers of well-sorted gravel; also includes poorly sorted deposits in which sand and gravel are mixed and occur in layers several feet thick. Locally contains minor amounts of fine particles

Particle sizes range from 25 percent coarse and 75 percent sand-sized through 100 percent sand-sized to 50 percent sand-sized and 50 percent fine. Locally contains minor amounts of fine particles

FINE DEPOSITS

Particle sizes range from 50 percent sand-sized and 50 percent fine to 100 percent fine; includes very fine sand, silt, and clay. May occur as regularly bedded, alternating, discrete layers of silt with some sand and clay or as thick, massive beds of clay with only minor amounts of sand and silt. May also be poorly sorted, very fine sand, silt, and clay. Locally contains scattered stones

TILL (HARDPAN) Poorly sorted mixture of large and small stones with sand-sized and fine particles in varying proportions. Some till, averaging less than 10 feet thick, is sandy, loose, and very stony; other till, commonly more than 10 feet thick, is less sandy, less stony, and very compact. Where these tills occur together, the loose, sandy till is always on top. The compact till forms the bulk of many smooth elongate hills (drumlins) even where the sandy till is exposed at the surface. Ruled pattern indicates areas where till is inferred to be more than 40 feet thick

SWAMP DEPOSITS

Fine and sand-sized particles commonly mixed with partly decomposed organic material in poorly drained areas. Locally contains scattered stones

ARTIFICIAL FILL Area that has been filled for his trays of there major a structum. Medical only where contensive

URBANIZED AREAS

where conditions have been altered by man; limits of altered and are unknown. Within these areas out and fill associated with building construction, parking areas, and constal crating is witespread and an - are fill a parjable thickness and extent commonly over les the natural matter n on the map

OPEN WATER BODIES

